Postel 15371

Network Working Group
Request for Comments #495
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Categories: TELNET, Protocols
References: RFCs 318, 435; NIC 7104

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BBN-NET
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TELNET Protocol Specification

Following much discussion of TELNET via the RFC series, an open meeting was held at UCLA on 5 March to formulate a new specification for the TELNET Protocol. Two attached documents (*TELNET Protocol Specification*, NIC #15372, and *TELNET Option Specifications*, NIC #15373) report the results of that meeting, which was attended by: Alex McKenzie, BBN-NET, co-chairman; Jon Postel, UCLA-NMC, co-chairman; Bob Braden, UCLA-CCN; Vint Cerf, Stanford University; Bernie Cosell, BBN-NET; Dave Crocker, UCLA-NMC; Steve Crocker, ARPA; John Davidson, Univ. of Hawaii; Gary Grossman, Univ. of Illinois; Bob Merryman, UCSD; Lou Nelson, UCLA-NMC; Mike Padlipsky, MIT-MULTICS: Milt Reese, FNWC; Bob Thomas, BBN-TENEX; Steve Wolfe, UCLA-CCN.

The two attached specifications referenced above have been reviewed by the meeting attendees, and should be viewed as the "official" TELNET Protocol (subject to the implementation schedule given below). Nevertheless, these documents are still subject to minor revisions and any pertinent comments should be addressed to me at the NIC as AAM, or by mail at:

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There are two key dates for a phasing in of the new protocol: the date when sites should feel free to send the "new" form of TELNET commands and special codes without expecting to receive "error" responses, and the date when sites may remove the code

which processes the "old" form of TELNET commands. Between these two dates, sites may gradually implement and test the "interpreter" for the new commands. It was the sense of the meeting that appropriate lead times to these two dates were about 60 and 260 days. Accordingly, these two dates are hereby established as 1 July 1973 and 1 January 1974.

I have also attached specifications for TELNET options which allow negotiation of:

- binary transmission
- echoing
- reconnection
- suppression of "Go Ahead"
- approximate message size
- use of a "timing mark"
- discussion of status
- extension of option code set

These specifications have been prepared by Dave Walden (BBN-NET) with the help of Bernie Cosell, Ray Tomlinson (BBN-TENEX) and Bob Thomas; by Jerry Burchfiel (BBN-TENEX); and by David Crocker (UCLA-NMC). It appears that these options cover most of the capabilities of the current version of TELNET, with the exception of "Hide Your Input." Dave Walden has also promised to specify the following options in the near future:

- NVT printer line width negotiation
- NVT printer page size negotiation
- negotiation of the mapping between the line terminator characters available on a physical terminal (e.g., LF, CR, NL) and the NVT characters to be transmitted (e.g., CR NUL, LF, CR LF).

Dave has also announced his intent to seek collaboration with Gary Grossman, Bob Braden, and perhaps others in defining an EBCDIC option. The announcement of intent to specify these options should, of course, be seen as useful information rather than as the granting of an "exclusive right" to Dave, or any other author.

I gratefully acknowledge the assistance of Bernie Cosell in the preparation of the protocol specification.

AAM/jm
Attachments